Small and medium sized wine producers dealing with business to business e-commerce: Towards a relational model for enhancing value (co-) creation

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Abstract. The internet has produced a forward-looking shift in the way we communicate, think and run economic activities around the globe. The revolution in Information and Communication Technology (ICT) has generated an innovating process in the agri-food sector that is far from being unwind. The wine industry is a case in point. Indeed, the industry has attempted to address the multifaceted challenges posed by electronic commerce since always. Business to business electronic commerce has been slower to develop than its counterpart, i.e. business to consumer E-commerce. However business to business e-commerce is starting to attract an increased interest, by showing a significant business value in terms of potential. Against this background, the slow development of B2B e-commerce has been linked to regulatory and economic reasons. In order to deal with such stumbling blocks, the paper suggests a shift towards an open platform that is aimed at facilitating transactions and interactions among businesses through a continuous problem-solving process in which trust and value is co-created by producers and customers through relational contracting.

1. Introduction

The internet has produced a forward-looking shift in the way we communicate, think and run economic activities around the globe. The Internet has allowed us to build a virtual place in which items are traded as well as orders and payments are made. As a result, the spatial and temporal concept of commercial interchanges is still evolving. The wine industry is a case in point. Indeed, the industry has attempted to address the multifaceted challenges posed by electronic commerce since always. Many business experiences have been accumulated in selling products directly to consumers, i.e. business to consumer E-commerce. Conversely, business to business commerce has been slower to develop than its counterpart.

The slow development of B2B e-commerce – in particular in relation to small and medium sized businesses – has been linked to regulatory and economic reasons. Through an investigation of the related stumbling blocks, the paper aims at exploring the implications of an intermediary-oriented e-marketplace that facilitates transactions and interactions in a problem-solving process in which trust and value is co-created by producers and customers through a relational contracting. This is analysed in the framework of further developing emerging trading opportunities for small and medium sized wine producers.

The structure of the paper is threefold. Part I examines what the main aspects of e-marketplaces and their role within the context of ICT. Part II recognises a need of rethinking the role of e-marketplace as intermediary in facilitating and building trust among businesses. Part III explores a (preliminary) model of relational intermediary-oriented e-marketplace. By filling the gap generated by the distance and the resulting lack of personal interaction among businesses, this model may represent a consistent opportunity to build trust and create value through e-marketplaces.


ICT has changed the way we do trade at all levels, including Business to Consumers (B2C) and Business to Business (B2B) transactions [1]. A relatively vast body of literature has investigated the role played by the e-commerce in the agri-food supply chain, thus enabling new commercial and trading patterns in the agri-food sector [2]. The potential of ICT in B2B e-commerce has been widely recognised in the agri-food sector; indeed, the revolution in ICT has generated an innovating process that is far from being unwind [3]. While B2B e-commerce is starting to attract an increased interest – by showing a significant business value in terms of potential – its slow development and diffusion requires a renovated attention in (re-) considering the stumbling blocks that are linked to both regulatory and economic reasons [4].

The wine industry is a case in point. Indeed, the industry has attempted to address the multifaceted challenges posed by e-commerce since always. The wine sector has been deeply involved with high expectations regarding the potential growth of the sector as results of adopting ICT. Producers had made many attempts in adjusting their habits as well as increasing their confidence in the digital instrument, by taking into consideration possible advantages and disadvantages in terms of legal and economic factors.

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In this framework, the development of e-marketplace has been considered in the literature as a corner-stone in the global process of improving ICT for building more efficient business models [5]. E-marketplaces have played (and are continuing to play) an important role in boosting the e-business world.

In the scientific literature, several scholars have devoted huge efforts in exploring definitions for electronic marketplace [6]. This consistently reflects the evolution that has involved e-marketplaces over the years [7]. By focusing on their unique characteristic of being able to bring multiple buyers and sellers together in one virtual market space, the present paper consider an e-marketplace as an open platform that is aimed at facilitating transactions and interactions among businesses [8]. In doing this, e-marketplace may enable both economy of scale and economy of scope.

2.1. E-commerce and its (legal) geographical boundaries

At first sight e-marketplace – and generally speaking, the entire e-commerce sector – may give the perception of eliminating the usual geographic boundaries. Indeed, it seems that the Internet may be considered as a unique and exceptional *unicum* of buyers and sellers that act in the same and infinite space. One of the consequences of this representation is the idea associated to the possible elimination of intermediaries, thus resulting in cutting costs – particularly for small and medium-sized businesses that may concretely access potentially unlimited markets with a higher profit margin.

The real world, however, suggests something different. When dealing with e-commerce, geographical boundaries exist. A real product, in our case wine, is physically shipped from one country to another one after finalising the purchase over the Internet. Therefore, the online transaction will be subject to all the possible issues that usually affect international trades. This implies that import and export regulations as well as food laws have to be considered. Consequently, the regulatory framework assumes a main relevance to determine the expansion and the success of the wine e-commerce.

Before the discussion moves to the regulatory issues, one preliminary aspect is worth to be further explored. The wine is a product to which not only import/export regulation applies, but also a (legal) awareness has been paid as a result of being destined to human consumption. Therefore, the regulatory burden rises considerably if compared to other items, such as clothes for example, due to the health issues of drinking wine. The health concerns are considered both in terms of consequent diseases and direct [9], and indirect effects [10].

The complex and indissoluble twine of legislations has been listed in relation to different areas, accordingly to the relevant literature [11]. Examples are specifically provided in relation to the EU legislation on wine export from non-EU countries to EU countries.

a. **Taxation systems.** It should be taken into consideration when deciding to export wine, in particular different rules regulating the tax system may considerably differ from country to country. In Europe, for example, the VAT rate can change among Member States as a uniform VAT system does not exist [12];

b. **Tariffs.** These include a wide range of expenses that need to be managed when dealing with certain countries [13]. In Europe, a specific database, called the "TARIC", is provided in order to allow interested companies to find out the amount of the tariffs [14];

c. **Licensing.** In order to export products in certain countries, producers should be aware of the existing regulation about licensing, i.e. a specific licence may be required to import wine [15];

d. **Labelling.** While the content of the labels may change over time, a producer that is willing to export to different countries should be confident with labelling legislation, thus considering different labels in compliance with the legal provisions. This part includes also Geographical Indications and other certification schemes, such as the organic certification process [16]. The EU regulatory framework is particularly stringent, i.e. Regulation 1169/2011 in combination with the implementing rules provided under the Regulation 607/2009 [17];

e. **Controls.** As previously mentioned, wine represents a good that could affect the consumer health; therefore, countries may establish different control system considering the fact that substances might be admitted in one country and not in others. In Europe, the Commission Regulation 555/2008 lays down implementing rules regarding, *inter alia*, certification and analysis report requirements [18].

Furthermore, Regulation 606/2009 specifies the oenological practices authorized in the EU [19].

2.2. Stumbling blocks

The wine sector has been traditionally influenced to a great extent by a number of long-established trading patterns and common habits in building business relationship. In particular, intermediaries have played an essential role in aggregating needs of buyers and producers, thus consolidating long-term relationships, personal commitment and trust among them [20].

This clashes with the risk and uncertainty involved in an environment in which all these patterns are less perceivable [21]. As illustrated in the literature, such patterns result in a higher perceived information asymmetry among parties in an e-business in which the transactions are carried out in an environment with only *virtual* relations – that is, an e-environment. More easily, it may give room for opportunist behavior. Information asymmetry affects all the points that characterise the electronic transaction: product, buyer-and-seller relationships and market environment [22].

In the literature, three key areas of concern have been identified in taking the decision to adopt an electronic marketplace: (1) market blocks; (2) organizational blocks; and, (3) socio-cultural blocks [23]. Such areas of concern represent stumbling blocks in the choice of small and medium-sized producers of using an electronic marketplace in their own business to business relationships. Such blocks has been further strengthen by a generalized lack of knowledge and skills in adopting an ICT tool, while the information asymmetry increases the resulting perceived risk [24].
3. Rethinking the role of intermediaries

While ICT has had the ambition of carrying out a disintermediation of (nearly) all the economic sectors, they are boosting intermediation in a different form that does not match with traditional categories [25]. An intermediary is valuable in consideration of its being-in-between nature [26]. The proposal, here, consists in a call for an intermediary oriented e-marketplace. Intermediaries are best situated to aggregate the needs of different and eventually heterogeneous groups of customers in purchasing products. Conversely, producers have a range of needs that include negotiation, transaction settling, pre- and post-sale assistance, advertising and logistics. An intermediary may provide an augmented value for producers by bundling such needs. This results in an intermediary that gathers knowledge while serving the interrelated needs of customers and producers [27]. Indeed, the intermediary-oriented e-marketplace becomes the best-informed player in business to business e-relationship. Being able to solve customer problems, it will be able to solve producer problems.

As illustrated in Fig. 1, this creates a mutually reinforcing cycle in which intermediaries give context to the information gained. This creates a competence based framework in which intermediaries may be considered as facilitator and ‘complementors’ to the producer [29]. Such a cycle will continue its problem-solving process by following the evolutionary movement of ICT. In this scenario, an e-marketplace acts as an intermediary in facilitating electronic transactions and enhancing the intangible asset of trust among businesses [30]. Indeed, such an intermediary-oriented e-marketplace may reduce uncertainties and risks through information sharing and problem solving; thus, limiting information asymmetry and the resulting transaction costs.

4. Towards a relational e-marketplace: A way to enhance value (co-)creation?

A shift is suggested towards an open platform that is aimed at facilitating transactions and interactions among businesses through a continuous problem-solving process in which trust and value is co-created by producers and customers through a relational contracting – as illustrated in Fig. 2.

While a comprehensive model around the many implications that are involved is too pretentious for this paper, the aim, here, is to contribute to the current discussion by building a common (yet preliminary) understanding of a relational intermediary-oriented model of e-marketplace. In order to discuss the resulting implications, this section will firstly investigate the role played by relational contracting in the model and, secondly, the conceptual framework of value co-creation within which long-term relationships and trust are built.

Relational contracting usually emerges under conditions of uncertainty and complexity, in which a relational contract relies on the trust between parties that enter a contractual relationship in order to work together for a mutual benefit outcome [31]. Such contractual arrangement is particularly common in business contexts, where flexible relational contracts are essential [32]. An extensive body of literature exists in the United States on the introduction of a degree of flexibility in contracts and the use of informal sanction to maintain cooperation among business actors [33]. Based on a qualitative research on business executives, Macaulay found that commercial long-term relationship rarely involves, or are based on, formal written contracts [34]. The primary motivation is performing contractual obligations consists in preserving reputation of being good business partners on which others may count for future deals.

The relational approach maintains that the contract should be considered as embedded in a specific socio-economic context. In such perspective, contracting does not occur in a ‘social vacuum’, but in a ‘relational web’ [35]. The temporal dimension of the relationship plays a key role in such understanding [36]. Accordingly to a commentator, ‘emphasis on discrete transactions abstracted from the ongoing relationships in which they occur distorts the character of the transactions and of the relationships themselves’ [37]. The introduction of a relational dimension into the contractual mechanism
has been widely discussed in academia (particularly in the United States) during the last fifty years; indeed, it produced extensive scientific research in the law area and economics studies. Arguably, the understanding of a relational dimension resulted in multiple changes in the way in which legal scholars deal with contractual arrangements, by contributed to some extent to adjust the classical contractual perspective [38]. Among others, the empirical studies and, more recently, the law and economics perspective have been set as a response to the changes in the understanding of law as a scientific area [39].

It is essential to note one of the aspects that plays a key role in such an approach: the contract should be understood as a relational event affected by external influences and internal values that produce ongoing adjustments and assure its progression [40]. Indeed, the value of solidarity and reciprocity play a key role in a relational approach, also representing a reaction to the individualism involved in classical contracting [41].

In order to build long-lasting relationships and trust among producers and customers involved in electronic transition, both parties need to interact in the value generation process. Such a long-lasting relationship and trust are created through customer retention [42]. This is achieved by ‘accessing customers in the target market, continuing customer dialogues, and choosing efficient ways in treating them such as personalized treatment’ [43]. However, the lack of direct interaction in e-commerce is considered as an element that may undermine the real possibility of converting customer retention in a long-term relationship [44].

In relationship building, a number of interactive activities has been identified in literature: (1) transactional interaction, in which the focus is on the transaction as a central economic activity and in particular the time frame is considered the key aspect; (2) value-added interaction, in which customers are attracted by a relational adjustment and amendment of the products to the needs of the customers; and, (3) collaborative interaction, in which customers and producers are committed in a close collaboration for mutual long-term benefits [45]. While substantial differences exist among the activities, these processes are considered as related parts that contribute to relationship building [46].

Customer and producer are closely intertwined during the interaction process. In this line, ‘co-creation is regarded as a function of interaction and value creation as direct interactions between value-creating resources and a beneficiary’ [47]. According to the literature, value creation process need to be considered through an interactive perspective under which is possible to investigate how the contribution of different resources are integrated in the process [48]. By way of interaction, both customers and producers share (and gain new) information, receive advice and build trust [49].

Within this framework, the literature has identified interrelated components as useful for a business to build a value co-creation capability: producers need to listen to and engage with their customers, thus becoming able to respond externally through the provision of tools for value co-creation and internally by establishing investment efforts in co-creation structures [50]. Such components are complementary in relationship building and value co-creation [51].

5. Conclusion

While e-marketplaces are considered a corner-stone in developing more efficient business models and boosting the e-business world, a number of stumbling blocks – both economic and regulatory – are identified as reasons of its slow development in business to business relationships. Against this background, the wine industry is a case in point. At first sight e-marketplace may give the perception of eliminating the usual geographic boundaries. However, such an e-environment and the relating lack of personal interaction increase the risks and uncertainty involved. In this line, information asymmetries between producers and customers have been recognised as affecting all the point in the electronic transaction.

A shift has been suggested towards an open platform that facilitates transactions and interactions among businesses through a continuous problem-solving process in which trust and value is co-created by producers and customers through a relational contracting. In a relational intermediary-oriented model, e-marketplace acts as an intermediary in facilitating electronic transactions and enhancing the intangible asset of trust among businesses. Such a model may reduce uncertainties and risks through information sharing and problem solving; thus, limiting information asymmetry and the resulting transaction costs.

References


[9] An example regarding the indirect effects may be linked to an improper content of the product that can cause side effects to the consumers, such as intoxication

[10] An example regarding the indirect effects is the addiction that might arise from an exaggerate consumption of wine


[13] An example is represented by Europe


[15] A number of specific examples exists that are applicable to EU Member States. It is also worth mentioning the ongoing debate in the United States regarding the fact whether it is legal or not to sell wine, over the Internet, without a licence to the States where a licence is required. See J.A. Tanford, E-commerce in Wine, Journal of Law, Economics and Policy, 3 (2007); and, V. H. Jones, Put a Cork in it: the Use of H.R. 1161 to end Direct Wine Shipping throughout the States once and for All, Journal of Food Law & Policy, 8 (2012)


[27] Among others, see M. Kourgiantakis, E. Petrakis, Modelling B2B E-marketplace: the role of intermediaries, Work supported by the Greek Ministry of Development, General Secretariat of Research and Technology under the Operational Programme Competitiveness (PENED, 2007)

[28] This figure is based on the research carried out in P. Anderson, E. Anderson, The New E-Commerce Intermediaries, MIT Sloan Management Review (Summer, 2002)


[34] See S. Macaulay, Non-Contractual Relations in Business: A Preliminary Study, American Sociological Review, 28 (1963)


[36] A fascinating analysis has been carried out in the Italian literature, see particularly M. Granieri, Il tempo e il contratto. Itinerario storico-comparativo sui contratti di durata (Giuffrè Editore, Milano, 2007)


[38] Among others, see E. Mertz, Afterword: Tapping the Promise of Relational Contract Theory Real Legal Language and a New Legal Realism, Northwestern University Law Review 94 (1999)

[39] A true pioneer may be considered K.N. Llewellyn which in 1925 argued that law is “as a thing in a flux” and its development depends on “non-legal- factors” See K.N. Llewellyn, The effects of legal institution upon economics, American Economic Review, 14 (1925). For a comprehensive analysis, see C. Farelli, L’eredità del realismo giuridico americano, Materiali per una storia della cultura giuridica, 1 (2006). Also, compare with M. Granieri, Il tempo e il contratto. Itinerario storico-comparativo sui contratti di durata (Giuffrè Editore, Milano, 2007)


[41] See M. Granieri, Il tempo e il contratto. Itinerario storico-comparativo sui contratti di durata (Giuffrè Editore, Milano, 2007)

[42] Mutatis mutandis, it is interesting to compare with the research findings in J. Riegelsberger, A. Sasse, Trustbuilders and trustbusters. The role of trust cues in interfaces to e-commerce applications, Proceedings of the 1st IFIP Conference on towards the e-Society: ecommerce, e-business, e-government: 17–30. IFIP Conference, 3–5 October 2001, Zurich (Switzerland)


